

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

Please amend claims 1, 4, 5, 6, 8, 10, 12, 14, 15, 18, 22, and 29, and cancel without prejudice claims 2, 3, 19, and 23.

1. (Currently Amended) A method for detecting a correct transmission format upon encountering a decoding error in a variable-format transmission scheme, wherein the decoding error results from an unsuccessful decoding of a frame including data, comprising:

prioritizing a plurality of permissible formats, resulting in a prioritized order; and

decoding the data according to one or more of said permissible formats in said prioritized order, and if said decoding according to one of said permissible formats is successful, selecting the corresponding permissible format as the correct transmission format;

wherein said prioritizing comprises:

determining a metric for each of said plurality of permissible formats; and

ordering said permissible formats according to said metrics to form said prioritized order;

wherein the frame further includes a format indication corresponding to a first format, wherein a permissible format indication corresponds to each of said plurality of permissible formats, and wherein said metrics are a function of the format indication and the corresponding permissible format indication.

Claims 2 – 3 (Cancelled)

4. (Currently Amended) The method of claim [[3]] 1, wherein said function comprises a Euclidean distance between a first code word associated with said format indication and a second code word corresponding permissible format indication.

5. (Currently Amended) The method of claim [[3]] 1, wherein said function comprises a projection of a first code word representing said format indication onto a Hadamard space,

wherein said Hadamard space includes code word vectors representing said plurality of permissible format indications.

6. (Currently Amended) The method of claim [[2]] 1, wherein the frame further includes a format indication corresponding to a first format, wherein said metrics are a function of historical format data.

7. (Original) The method of claim 6, wherein said historical format data comprises the number of occurrences of said permissible formats during a first time interval.

8. (Currently Amended) The method of claim [[2]] 1, wherein said determining a metric comprises:

tracking a number of occurrences corresponding to each of said permissible formats over a first time interval; and

calculating said metrics using said number of occurrences of the corresponding permissible format.

9. (Original) The method of claim 8, wherein said first time interval ends prior to the unsuccessful decoding of the frame.

10. (Currently Amended) The method of claim [[2]] 1, wherein the frame is one of a plurality of frames transmitting a block of data, wherein each of said metrics is at least a function of the number of occurrences of the corresponding permissible format over said block of data.

11. (Original) The method of claim 10, wherein the frame includes a plurality of sub-channels, wherein a transport format combination indicator is associated with each of said plurality of frames, and wherein each of said metrics is further a function of said transport format combination indicators.

12. (Currently Amended) The method of claim [[2]] 1, wherein said decoding comprises decoding the data according to each of said permissible formats in said prioritized order until the data is correctly decoded, or until said permissible formats have been exhausted.

13. (Original) The method of claim 12, wherein only those permissible formats having a metric within a first range are included in said prioritized order.
14. (Currently Amended) The method of claim [[2]] 1, wherein said decoding comprises partially decoding the data until it can be determined whether said decoding is successful.
15. (Currently Amended) A method for decoding data upon encountering a transmission error in a variable-format transmission scheme, wherein the error results from an unsuccessful decoding of a frame including data, comprising:
- determining a metric for each of a plurality of permissible formats;
 - prioritizing said permissible formats according to said metrics, resulting in a prioritized order; and
 - decoding the data according to one or more of said permissible formats in said prioritized order; wherein the frame further includes a format indication corresponding to a first format, wherein a permissible format indication corresponds to each of said plurality of permissible formats, and wherein said metrics are a function of the format indication and the corresponding permissible format indication.
16. (Original) The method of claim 15, wherein said decoding comprises decoding the data according to each of said permissible formats in said prioritized order until the data is correctly decoded, or until said permissible formats have been exhausted.
17. (Original) The method of claim 16, wherein said decoding further comprises reporting an error to an upper application layer upon exhausting said permissible formats.
18. (Currently Amended) A remote station apparatus comprising:
- means for receiving a frame, wherein said frame includes data;
 - means for determining a metric for each of a plurality of permissible formats upon the unsuccessful decoding of said frame; and

means for decoding said data according to one or more of said permissible formats in order of said metrics, and if said decoding is successful, for selecting the corresponding permissible format as the correct transmission format;

wherein said frame further includes a received format indication, wherein a permissible format indication corresponds to each of said plurality of permissible formats, and wherein said means for determining comprises means for calculating the Euclidean distance between the code words representing said received format indication and said permissible format indications.

19. (Cancelled)

20. (Original) The apparatus of claim 18, wherein said frame further includes a received format indication, wherein a permissible format indication corresponds to each of said plurality of permissible formats, and wherein said means for determining comprises means for projecting a first code word representing said received format indication onto a Hadamard space, wherein said Hadamard space includes code word vectors representing said plurality of permissible format indications.

21. (Original) The apparatus of claim 18, wherein said means for determining comprises:
means for tracking a number of occurrences corresponding to each of said permissible formats over a first time interval; and
means for calculating said metrics using said number of occurrences of the corresponding permissible format.

22. (Currently Amended) A computer readable media embodying a method for detecting a correct transmission format upon encountering a decoding error in a variable-format transmission scheme, wherein the decoding error results from an unsuccessful decoding of a frame including data, the method comprising:

determining a metric for each of a plurality of permissible formats;
prioritizing said permissible formats according to said metrics, resulting in a prioritized order; and

decoding the data according to one or more of said permissible formats in said prioritized order, and if said decoding is successful, selecting the corresponding permissible format as the correct transmission format;

wherein the frame further includes a format indication corresponding to a first format, wherein a permissible format indication corresponds to each of said plurality of permissible formats, and wherein said metrics are a function of the format indication and the corresponding permissible format indication.

23. (Cancelled)

24. (Original) The computer readable media of claim 22, wherein said function comprises a Euclidean distance between a first code word associated with said format indication and a second code word corresponding permissible format indication.

25. (Original) The computer readable media of claim 24, wherein said function comprises a projection of a first code word representing said format indication onto a Hadamard space, wherein said Hadamard space includes code word vectors representing said plurality of permissible format indications.

26. (Original) The computer readable media of claim 22, wherein the frame further includes a format indication corresponding to a first format, wherein said metrics are a function of historical format data.

27. (Original) The computer readable media of claim 22, wherein only those permissible formats having a metric within a first range are included in said prioritized order.

28. (Original) The computer readable media of claim 22, wherein said decoding comprises partially decoding the data until it can be determined whether said decoding is successful.

29. (Currently Amended) A wireless communication system comprising:

a transmitter configured to encode a frame according to a first transmission format, wherein said first transmission format is selected from a plurality of permissible formats; and

a receiver configured to:

- receive said frame, wherein said frame includes a received format indication,
- decode said frame according to the transmission format corresponding to said received format indication,
- prioritize said plurality of permissible formats upon encountering a decoding error with said frame, resulting in a prioritized order, and
- decode said frame according to one of more of said plurality of permissible formats in said prioritized order;

wherein said prioritizing comprises:

- determining a metric for each of said plurality of permissible formats; and
- ordering said permissible formats according to said metrics to form said prioritized order;

wherein the frame further includes a format indication corresponding to a first format, wherein a permissible format indication corresponds to each of said plurality of permissible formats, and wherein said metrics are a function of the format indication and the corresponding permissible format indication.

30. (Original) The wireless communication system of claim 29, wherein said receiver is further configured to decode said frame according to each of said plurality of permissible formats in said prioritized order until said frame is correctly decoded, or until said permissible formats have been exhausted

31. (Original) The wireless communication system of claim 29, wherein said transmitter is located with a base station, and wherein said receiver is located within a user terminal.